

Monday, June 08, 2015 3:47:22 PM

Item ID: D130-700-011

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Bearpaw

Stop *NS2*

Start Date: 5/31/15 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 6/08/15 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: MLJ Date: JUN 10 2015 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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Work Order ID 133523

Monday, June 08, 2015 3:47:22 PM

133523

Page 2

Item ID: D130-700-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bearpaw

Start Date: 5/31/15 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 6/08/15 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Packaging	0.00				DAS 6			
180						9-89			
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D130-700-011								
	LOCATION: FG012								
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

JUN 23 2015
JUN 23 2015
JUN 23 2015

JUN 23 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Monday, June 08, 2015 3:47:20 PM

Page 1

Work Order ID: 133523

133523

Parent Item: D130-700-011

D130-700-011

Parent Item Name: Bearpaw

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-12A		Purchased	No			170	Each	205.0000	4	4			DAS 6 9-89
AN4-12A									**				
Bolt	DAS 02 9-89											DAS 27 9-89	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		10							
				120423		10							
				ST344		195							
				M131803		1							
				<u>m131957</u>		194							
AN4-15A		Purchased	No			170	Each	314.0000	8	8			DAS 6 9-89
AN4-15A									**				
Bolt	DAS 02 9-89											DAS 27 9-89	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		38							
				120449		38							
				ST325A		276							
				m130358		8							
				m131320		13							
				<u>m131957</u>		55							
				m132317		200							

JUN 17 2015

DQA: _____ Date: _____



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Page 2

Work Order ID: 133523

133523

Parent Item: D130-700-011

D130-700-011

Parent Item Name: Bearpaw

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 1.00

Required Qty: 1.00

D2182B060

Manufactured No

170

Each

82.0000

4

4

D2182B060

Clamp Cushion Black 6.0 "Long

DAS
27
9-89

DAS
27
9-89

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

FG

15

93429

15

ST410

67

111120

17

130681

50

4

D2274

Manufactured No

170

Each

463.0000

12

12

D2274

Radius Block

DAS
27
9-89

JUN 17 2015

DAS
27
9-89

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

FG

12

86855

12

ST006

316

102156

2

106191

46

108466

12

127579

208

128474

36

129934

12

ST012a

135

131031

135

12

Monday, June 08, 2015 3:47:21 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

Picklist Print

Monday, June 08, 2015 3:47:21 PM

Page 3

Work Order ID: 133523

Parent Item: D130-700-011

Parent Item Name: Bearpaw

133523

D130-700-011

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 1.00

Required Qty: 1.00

D2519

Manufactured No

170

Each

66.0000

4

4

D2519

Clamp

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

ST542

66

101510

6

129515

8

132424

50

99606

2

**

DAS
27
9-89

DAS
26
9-89

D2529

Manufactured No

170

Each

430.0000

12

12

D2529

Washer

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

ST007

416

131045

416

ST008

14

128950

14

**

DAS
27
9-89

JUN 17 2015

DAS
26
9-89

D3167-1

Manufactured No

Each

2.0000

2

D3167-1

Bearpaw

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

ST470A

2

110296

1

43828

1

**

DAS
27
9-89

JUN 17 2015

DAS
26
9-89

B133169

2

Monday, June 08, 2015 3:47:21 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions. ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Monday, June 08, 2015 3:47:21 PM

Page 4

Work Order ID: 133523

Parent Item: D130-700-011

Parent Item Name: Bearpaw

133523

D130-700-011

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 1.00

Required Qty: 1.00

D3171-1 Manufactured No

170 Each 12.0000 4 4

D3171-1

Angle Bracket

DAS
27
9-89

DAS
27
9-89

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

ST023

12

130078

4

132798

4

133204

4

4

MS21042L4 Purchased No

170 Each 5,121.000 12 12

MS21042L 4

Locknut

DAS
27
JUN 7 2015

DAS
27
9-89

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

FP001

26

m124231

26

GA

208

m127813

208

ST260a

4062

m130799

56

m131803

6

m132262

1000

m132382

3000

ST305

825

m128300

8

m130388

7

m130922

97

m131618

12

m132123

701

10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Monday, June 08, 2015 3:47:22 PM

Page 5

Work Order ID: 133523

133523

Parent Item: D130-700-011

D130-700-011

Parent Item Name: Bearpaw

Start Date: 5/31/15

Required Date: 6/08/15

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0463J

Purchased

No

170

Each

4,707.000

12

12

NAS1149D0463.J

WASHER

DAS
27
JUN 17 2015
9:59
DAS
27

DAS
02
9-89

DAS
26
9-89

Location

Loc Qty

Loc Code

GA

41

M129390

41

ST260a

1305

M132317

1305

ST269

3361

M129682

86

M130799

371

M132035

2904

12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

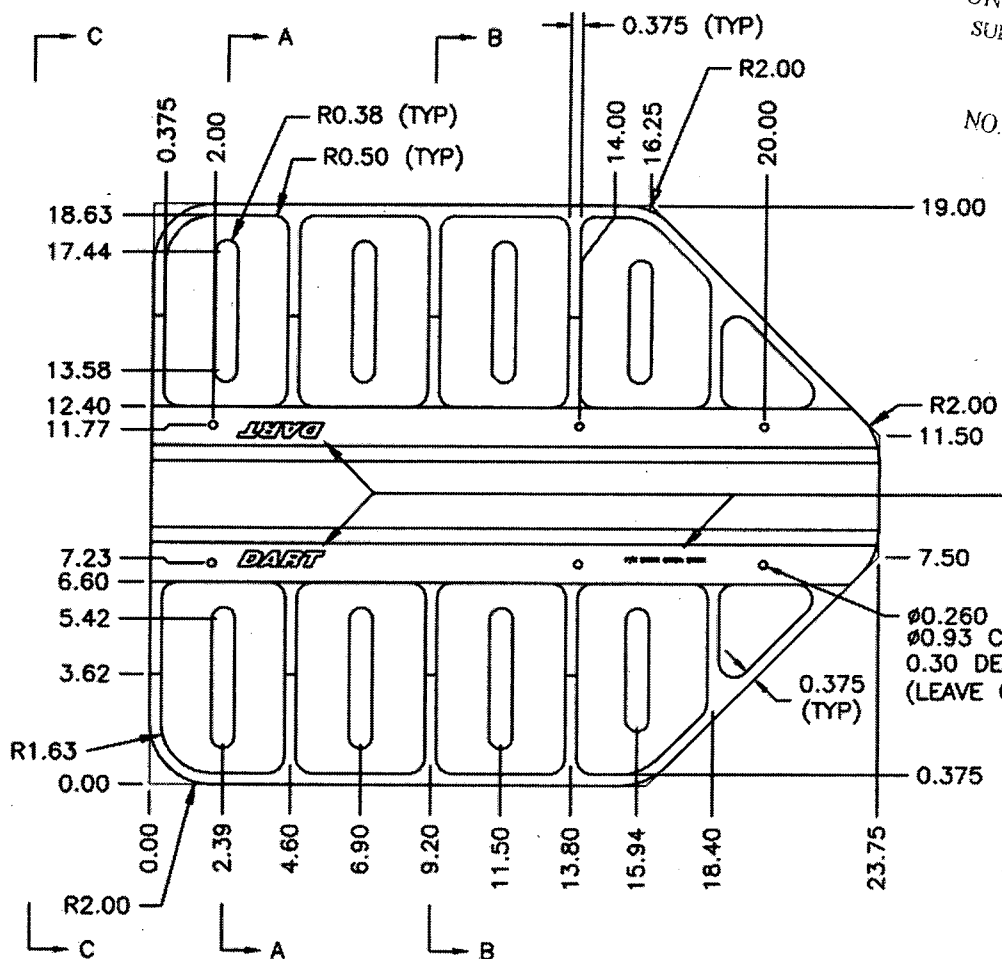
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 133523 MCLJ
1506-1

ENGRAVE LOGO TO MAX
DEPTH OF 0.012. ENGRAVE
PART AND BATCH NUMBERS
TO MAX DEPTH OF 0.010.
(TYPICAL LOCATION AS
ILLUSTRATED)

02-10-25-4



 		DARI AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. A
		D3167	SHEET 1 OF 2
DATE		TITLE	SCALE
02.10.08		BEARPAW	1:6
A	02.10.08	NEW ISSUE	
A1	02.12.17	5.80 WAS 5.50	



D3167-1

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

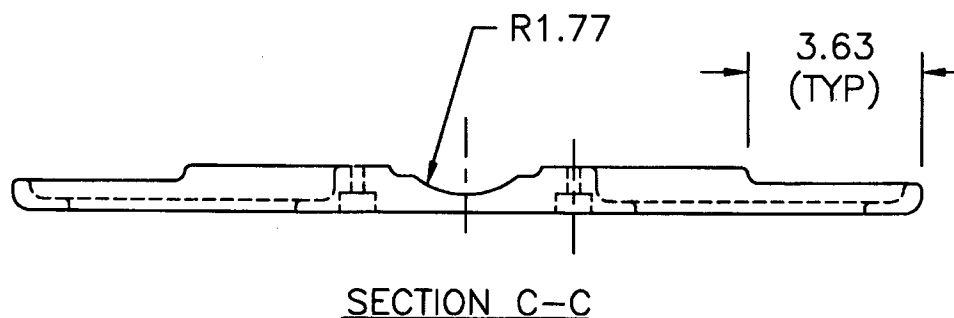
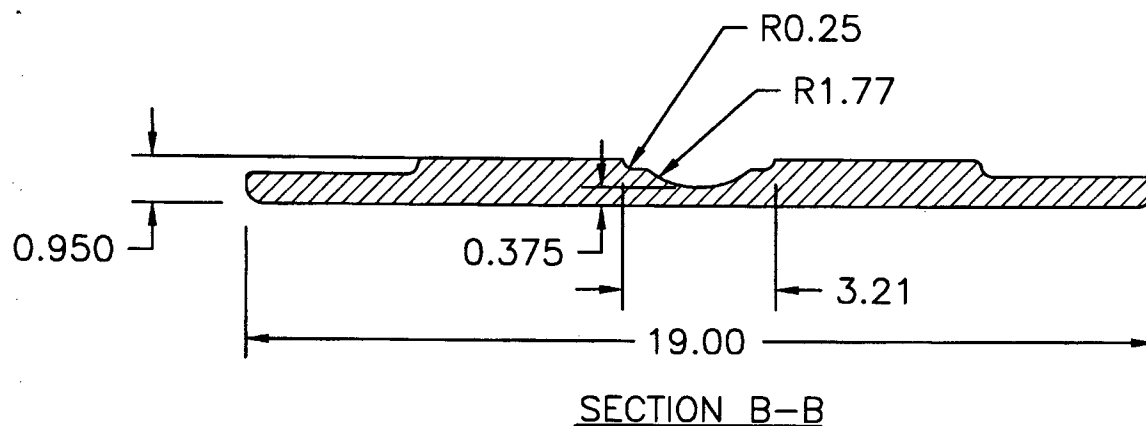
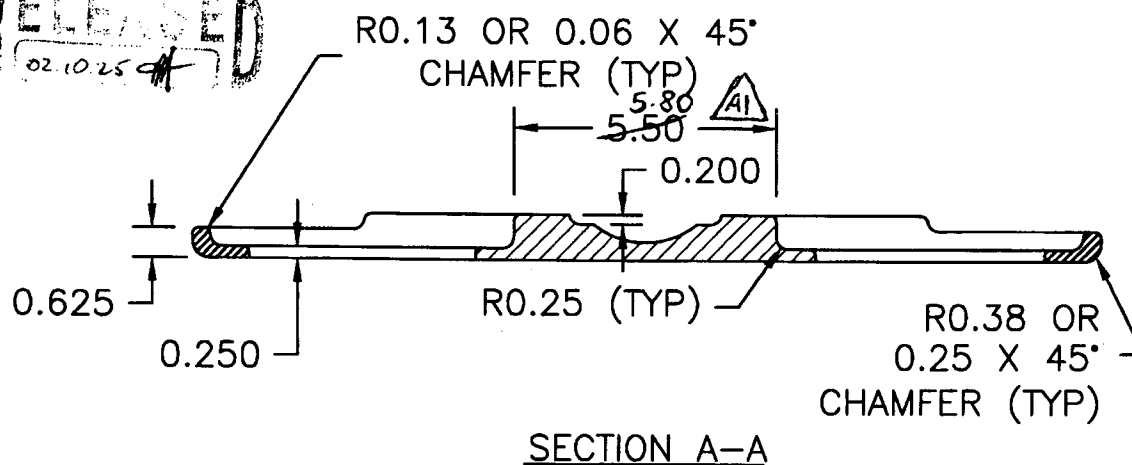
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DESIGN 	DRAWN BY 	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3167	REV. A SHEET 2 OF 2
DATE 02.10.08		TITLE BEARPAW	SCALE 1:4

RELEASED
02.10.25



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5 PARTS LIST

Qty -011	Qty -021	Part Number	Description
X		D130-700-011	BEARPAW INSTALLATION
	X	D130-700-021	WEARPLATE KIT
4		D2182B060	Rubber Cushion
12		D2274	Radius Block
12		D2529	Washer
4		D2519	Clamp
2		D3167-1	Bearpaw
4		D3171-1	Angle
	2	D3862-041	Wearplate
4	4	AN4-12A	Bolt
8	8	AN4-15A	Bolt
12	12	NAS1149D0463J	Washer
12	12	MS21042L4	Nut (or MS21042-4)